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is exceptional with us, is the rule with them, but we can at no level positively declare, "here it is absolutely impossible that consciousness should exist." We must understand the subject far more thoroughly than now ere this question can be definitely decided.<sup>1</sup>

(To be continued.)

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## KITCHEN GARDEN ESCULENTS OF AMERICAN ORIGIN. II.

BY E. LEWIS STURTEVANT, M.D.

(Continued from p. 457, May number.)

*Jerusalem Artichoke*.—Botanical analogies and the testimony of contemporaries agree, as we have seen, says De Candolle<sup>2</sup> in considering this plant to be a native of the north-east of America. It was introduced to England about 1617, as we learn from the second edition of Gerarde,<sup>3</sup> and this is nearly coincident with the first mention of this species in Europe, that by Fabio Colonna.<sup>4</sup> Lescarbot brought these roots into France about this time.<sup>5</sup> "Hartichokes" are mentioned as growing in Virginia in 1648,<sup>6</sup> and "artichokes" were cultivated at Mobile in 1775, but whether this plant or not, does not appear from the context.<sup>7</sup> They are mentioned by writers on American gardening from 1806 onward.<sup>8</sup> In Pennsylvania the tubers are yet raised by some and sent to the New York market, "they are disposed of for lunch purposes and there is a ready sale."<sup>9</sup>

Most interesting articles on the geographical and botanical history of this plant, by Messrs. J. Hammond Trumbull and Asa Gray, will be found in the *American Journal of Science*, May, 1877, and April, 1883.

*Martynia*.—Two species, *Martynia proboscidea* Glox. and *M. lutea* Lindl., occur in our gardens, the seed pods while yet tender

<sup>1</sup> See in this connection Cope, On Catagenesis, AMER. NAT., Oct., 1884.

<sup>2</sup> Orig. of Cult., Pl. 44.

<sup>3</sup> Herbal, 1636, 753.

<sup>4</sup> Ecphasis minus cognitarum stirpium, Rome, 1616.

<sup>5</sup> Hist. la Nouv. France, 1618.

<sup>6</sup> A Perfect Disc. of Va., Lond., 1649, 4.

<sup>7</sup> Romans, Nat. Hist. of Fla., I, 115.

<sup>8</sup> M'Mahon, 1806, Gardiner and Hepburn, 1818, as good for hogs and cattle, Fessenden, 1828, etc.

<sup>9</sup> Agr. of Pa., 1883, 358.

serving for pickles. The former was first known in Europe in 1738, the latter, a South American species, not until 1824.<sup>1</sup> *M. craniolaria* Glox., the white flowered, has appeared by name in one at least of our seed catalogues among garden vegetables. It was described in 1785. *M. violacea* Engelm. occurs in the South-western States, and the Apache Indians gather the half ripe seed pods to be used for food.<sup>2</sup>

The *Martynia* was not an inmate of our kitchen gardens in 1828, not being mentioned in Thorburn's seed catalogue of that date, nor in Noisette's *Manual du Jardinier*. It is not mentioned for American gardens by Schenck in 1854,<sup>3</sup> but is by Burr in 1863. It hence may be considered as of recent introduction.

*Nasturtium*.—*Tropæolum majus* L. and *T. minus* L., find place in our seed catalogues for use as a garnish and salad, and the unripe seed pods for salads and pickling. Both are natives of Peru. The former came to Europe in 1684, according to Linnæus,<sup>4</sup> or 1686, according to Noisette,<sup>5</sup> and according to Collinson's manuscripts it reached England in 1686. The dwarf nasturtium was known at Lima in 1580 by Dodonæus, was cultivated in England by Gerarde in 1596, and was a great favorite with Parkinson in 1629; it was then lost, but afterwards reintroduced. Miller, in 1768, says it was then only less common than the tall.

Both the tall and the dwarf were in French kitchen gardens in 1828,<sup>6</sup> but the tall seems to have then only reached our culture, as the dwarf is not mentioned in Thorburn's seed catalogue of 1828. The tall is mentioned by M'Mahon as in American gardens in 1806, by Gardiner and Hepburn in 1818, and the tall and dwarf by Bridgeman in 1832. Both were grown in English gardens in 1778.<sup>7</sup> One common name, "Indian cress," used as late as 1854 by writers on American gardening, would suggest that the use as a vegetable was coincident with its second introduction, as Parkinson's fondness for it would seem to imply.

<sup>1</sup> Noisette *Man. du Jard.*, 537.

<sup>2</sup> *Dept. Agr. Rept.*, 1870, 422.

<sup>3</sup> *Gard. Text-book*.

<sup>4</sup> *Field and Gard. Veg. of Am.*

<sup>5</sup> *Miller's Dict.*

<sup>6</sup> *Man. du Jard.*, 508.

<sup>7</sup> *Miller's Dict.*

<sup>8</sup> Noisette, *Man. du Jard.*, 337.

<sup>9</sup> Mawe's *Gardener*.

The nasturtiums have received greater welcome in our flower gardens than for table use, and a large number of varieties have been developed as florists' plants.

*Peppers.*—There seems to be now scarcely a doubt as to the American origin of the peppers, *Capsicum* *sp.* It seems, however, to have escaped the attention that it deserves, that the large number of forms already developed at the time of the discovery of America is indicative of a long cultivation, and adds testimony to the agricultural habits of the people. A vernacular name, especially if short, is very persistent in its horticultural use, and in those varieties of vegetables which are grown in kitchen gardens, some names alone, without descriptive text, may be assumed as indicative of the existence of a variety to which the same name is applied to-day. Such investigations as we have made indicate that this is especially true for the peppers.

How many species there are of peppers I cannot make out. Many described species can be unhesitatingly referred to *Capsicum annuum*, a species of great variability, and which seems to be a perennial in some regions, as in Florida, as I am informed, and in Chili, according to Molina. We shall make use of the specific names as we find them.

According to Bancroft<sup>1</sup> the use of peppers by the Southern natives was as great in ancient times as is now observed. Saha-grun<sup>2</sup> mentions chili more frequently than any other herb among the edible dishes of the Aztecs; Veytia<sup>3</sup> says the Olmecs raised chili before the time of the Toltecs. "It is the principal sauce and the only spice of the Indians" as Acosta writes in 1578, and Schomburgh says that the present Indians of Guiana eat the fruit of these plants in such abundance as would not be credited by an European unless he were to see it. Columbus carried peppers with him on his return voyage in 1493,<sup>4</sup> and Peter Martyr, in his epistle dated September, 1493, says it was "more pungent than that from Caucasus."<sup>5</sup> In 1494 a letter written by Chanca, physician to the fleet of Columbus on his second voyage, to the Chapter of Seville, refers to its use as a condiment. *Capsicum* and its uses are more particularly described by Oviedo,

<sup>1</sup> Native Races, II.

<sup>2</sup> Hist. Gen., II, lib. VIII.

<sup>3</sup> Hist. Ant. Mej., I, 154.

<sup>4</sup> Irving's Columbus, I, 238.

<sup>5</sup> ib., III, 425.

who reached tropical America from Spain in 1514. Clusius asserts the plant was brought from Pernambuco by the Portuguese to India, and he saw it cultivated in Moravia, in 1585.<sup>1</sup>

Hans Stade,<sup>2</sup> during his captivity in Eastern Brazil, about 1550, says the "pepper of the country is of two kinds; the one yellow the other red; both, however, grow in like manner. When green it is as large as the haws that grow on hawthorns. It is a small shrub about half a fathom high, and has several leaves: it is full of peppers which burn the mouth." G. de Vega,<sup>3</sup> writing of Peru in 1609, says the most common pepper is "thick, somewhat long, and without a point. This is called '*rocot uchu*'<sup>4</sup> or 'thick pepper,' to distinguish it from the next kind. They eat it green, and before it assumes its ripe color, which is red. There are others yellow, and others brown, though in Spain only the red kind has been seen. There is another kind, the length of a *geme* (5 inches?), a little more or less, and the thickness of the little finger. These were considered a nobler kind, and were reserved for the use of the royal family. \* \* \* \* Another kind of pepper is small and round, exactly like a cherry with its stalk. They call it '*chinchi uchu*,' and it burns far more than the others. It is grown in small quantities, and for that reason is the more highly esteemed." Cieza de Leon,<sup>5</sup> who traveled in Peru, 1532-50, speaks of the *Capsicum* as a favorite condiment of the Peruvian Indians. Molina<sup>6</sup> says many species of *Capsicum* called by the Indians "*thapi*" are cultivated in Chili, among others the annual, which is there perennial, the berry pimento and the pimento with a subligneous stalk. Wafer, 1699,<sup>6</sup> says on the isthmus they have two sorts of pepper, the one called *bell* pepper, the other *bird* pepper, and great quantities of each are much used by the Indians." Each sort grows on a weed or shrubby bush about a yard high. The *bird* pepper has the smaller leaf, and it is by the Indians better esteemed than the other." Ligon, 1647-53,<sup>7</sup> also mentions two sorts in Barbadoes, "the one so like a child's corall as not to be

<sup>1</sup> Pharmacog., 406.

<sup>2</sup> Hak. Soc. ed., p. 166.

<sup>3</sup> Royal Com. Hak. Soc. ed., II, 365.

<sup>4</sup> Hak. Soc. ed. Travels, 232, note.

<sup>5</sup> Hist. of Chile, ed. of 1808, I, 95.

<sup>6</sup> Voy. to Isth. of Am., 100.

<sup>7</sup> Hist. of Barbadoes, 79.

discerned at the distance of two paces; a crimson and scarlet mixt, the fruit about three inches long, and shines more than the best polished corall. The other, of the same color and glistening as much, but shapt like a large button of a cloak; both of one and the same quality; both so violently strong, as when we break but the skin, it sends out such a vapor into our lungs, as we fall all a coughing. \* \* \* \* It grows on a little shrub, no bigger than a gooseberry bush." In Jamaica, Long<sup>1</sup> says "there are about fifteen varieties of the *Capsicum* in this island, which are found in most parts of it. Those which are most commonly noticed are the *bell* pepper, *goat*, *bonnet*, *bird*, *olive*, *hen*, *barbary*, *finger*, *cherry*, &c. Of these the *bell* is esteemed most proper for pickling."

*Capsicum annuum* L., has never been found wild, but *C. frutescens* Willd. has been found wild, apparently indigenous, in South America. De Martius brought it from the banks of the Amazon, Poeppig from the province of Maynas in Peru, and Blanchet from the province of Bahia.<sup>2</sup> The form, *C. indicum* Rumph. = *C. frutescens* L., is said by Ainslie<sup>3</sup> to be constantly found in a wild state in the islands of the Eastern archipelago.

*Capsicum annuum* L.—According to Naudin *C. longum* DC., and *C. grossum* Willd., are not specifically distinct from this plant. It is said by Clusius to have been brought by the Portuguese from Brazil to India,<sup>4</sup> and reached England in 1548;<sup>5</sup> and is mentioned by Gerarde as being under cultivation in his time. The fruit is variable in form and color, as is also the plant. It was mentioned by Louriero (1790 or 1798) as a cultivated plant of Southern China, but has not been noticed by the Chinese writers of the sixteenth century or in others of more recent date, although nowadays much cultivated in China.<sup>6</sup> It is the *chilli* pepper of India, according to Firminger,<sup>7</sup> while Drury assigns the name *chilly* to *C. frutescens* L.

*C. angulosum* Mill. (1743).—Bonnet pepper of Miller. It is a variety of the preceding, and was described by Tournefort in

<sup>1</sup> Jamaica, ed. 1774, book III, chap. VIII, 721.

<sup>2</sup> De Candolle, Orig. of Cult. Pl., 290.

<sup>3</sup> Mat. Med., I, 306.

<sup>4</sup> Pharmacog., 453.

<sup>5</sup> Booth, Treas. of Bot.

<sup>6</sup> Bretschneider, On the study, &c., p. 17.

<sup>7</sup> Gard. in India, 153.

1700.<sup>1</sup> The name is the same as used by Long for one of his Jamaica varieties, and is perhaps one of the sorts described by Ligon, 1647-53, as occurring in Barbadoes, "shaped like a large button of a coat." The fruit is described by Miller as variable, some being bell-shaped, and Tournefort's name would imply a heart-shaped fruit.

*C. baccatum* L.—Bird pepper, according to Miller, and synonymous with *C. frutescens* var. L., *C. fructu minimo conico rubro* Brown, etc., and described among Jamaica plants by Sloane and Brown, in Amboina by Rumphius (1750), and as *C. brazilianum* Clusius (1601). It differs little from *C. frutescens*, and the berries are very pungent. *Bird* pepper is mentioned by name by Long in Jamaica, and by Wafer for the Isthmus; is perhaps the pepper "as large as haws" described in Brazil by Hans Stade. It has been in England since 1731,<sup>2</sup> and a "*bird* or *West Indian*" was in American gardens preceding 1828. It is mentioned as well known in India by Firminger and Drury, but I do not identify it with any of the present varieties of our seed catalogues. From an uncertain authority<sup>3</sup> it is said to grow wild from Southern Texas to Arizona, but it is not catalogued in the report on the plants of the "United States and Mexican Boundary Survey," 1858, unless it be synonymous with *C. microphyllum* Dun.

*C. cerasiforme* Mill.—Cherry pepper, also described by Tournefort, 1700. It was sent from the West Indies. It is probably one of the sorts described for Peru by Garcilasso de la Vega under the name *chinchí uchu*. It is also among the names listed by Long for Jamaica, and was in American gardens in 1806 or before. It is a variety of *C. annuum*, and the fruit is quite variable in form and color, some sorts being yellow. The form figured in Hortus Eystellensis, 1613, is precisely the cherry pepper of our gardens.

*C. conoides* Mill.—Came to Miller from Antigua under the name of *hen* pepper. This is a name which appears in Long's list of Jamaica sorts. The description of the fruit would answer to that of the oxheart of some of our seed catalogues.

*C. cordiforme* Mill., or heart-shaped Guinea pepper, was also described by Tournefort, 1700.<sup>4</sup> It has several varieties, the

<sup>1</sup> Miller's Dict.

<sup>2</sup> Booth, Treas. of Bot.

<sup>3</sup> Vick's Monthly, 1879, 184.

<sup>4</sup> Miller's Dict.

fruits varying in size, shape and color, some sorts bearing yellow. It can be referred to *C. annuum*, and seems to be the oxheart of some of our seedsmen.

*C. fastigiatum* Blume, syn. *C. minimum* Roxb.—It is the *C. frutescens* L. Spec. Plant., but not of L. Hort. Clif., to which the name *C. frutescens* is usually applied.<sup>1</sup> It occurs abundantly wild in Southern India, and is extensively cultivated in tropical Africa and America.<sup>2</sup> According to Miller it is *C. indicum* Rumph. (Amboyna), and the *Capo-molago* of Reede (Malabar) which fixes its presence in the East Indies about 1700. It is described by Loureiro, and was in England in 1656. It does not appear to be among the species grown in American gardens, all of which can be referred to *C. annuum*.

*C. frutescens* L.—This has been called *barbary*, *cayenne*, *shrubby* and *goat* pepper. It seems to have occurred in our seed catalogues under the name of True Cayenne, but does not appear to be cultivated with us now. It was in English gardens in 1656.<sup>3</sup> and seems to have been called *barbary* from the size and shape of its fruit, which are like those of a berberry. It seems to be cultivated and to have native names in Hayti, Peru, Mexico, India, Burma, Malabar, Ceylon, Yemen, Greece, Egypt, &c., and furnishes much pod pepper to commerce. It has been found wild from Bahia to Eastern Peru in tropical America.<sup>4</sup> In Ceylon a red, a yellow and a black fruited form are known.<sup>5</sup>

*C. grossum* Willd.—This is the pepper with large sweet square fruits, and furnishes many varieties and synonyms to our seed catalogues, and is considered to be but a form of *C. annuum*. It may be the *rocot uchu* of G. de Vega. It was, according to Miller's Dictionary, described by Besleri in 1613,<sup>6</sup> by Bauhin in 1671, and by Tournefort in 1700. *C. tetragonum* is a synonym by Miller, 1737. It was cultivated by Miller in 1759. According to Noisette<sup>7</sup> it reached Europe in 1548. It is called in Hindustani *kaffrie-murich*, and the fruit, as large as a small apple, is called by the English in India *coffrie chili*,<sup>8</sup> or, according to Fir-

<sup>1</sup> Pharmacog., 452.

<sup>2</sup> ib.

<sup>3</sup> Booth, l. c.

<sup>4</sup> De Candolle.

<sup>5</sup> Moon, Cat. of Ceylon Pl., 16.

<sup>6</sup> The type, but not our varieties in Hortus Eystellensis, (Besleri), 1613.

<sup>7</sup> Man. du Jard., 520.

<sup>8</sup> Ainslie, Mat. Med., 1, 307.



minger, *bell* pepper.<sup>1</sup> The squash or tomato-shaped, sweet mountain, sweet Spanish and many other similar varieties of our seed catalogues belong to this form, of which the first was in our gardens preceding 1828, as also this and the sweet Spanish in French gardens. There are red and yellow sorts, as in most of the so-called species. This is perhaps the *bell* of Long's Jamaica list, as he says it is esteemed most proper for pickling.

*C. longum* DC. is another form usually referred to *C. annuum*. It reached Europe in 1548,<sup>2</sup> or before,<sup>3</sup> and would appear to be the second kind, so much esteemed, of De Vega, and the one of the sorts referred to by Ligon as "resembling a child's corall." *Corail* is yet one of the names for this sort in France. It was grown in England in 1597 and before, as Gerarde speaks of it. There is a figure of it in Fuchsius' *Historia Stirpium*, Basle, 1542, under the name of *siliquastrum* or *calicut* pepper, and a statement that the plant had been introduced into Germany from India a few years previously.<sup>4</sup> It was in American gardens, by name at least, before 1806, and is the *long red* or *long yellow* of our present seed catalogues.

*C. microphyllum* Dun. is said by Torrey to occur in Western Mexico, Chihuahua, Nuevo Leon, etc., but he does not say whether cultivated or wild. The Mexicans call it *chipatane*, and use the fruit like other red peppers.<sup>5</sup>

*C. nepalense* Drury is a variety growing in Nepaul, and very pungent and acrid.<sup>6</sup>

*C. olivæforme* Mill.—A variety of *C. annuum*, and described by Miller in 1752, and by Tournefort in 1700. It came from Barbadoes,<sup>7</sup> and the name appears in Long's Jamaica list. It may be the sort which appears in our catalogues under the name of cranberry, but other kinds occasionally produce olive-shaped fruits.

*C. sinense* L.—This sort was described by Linnæus and Jacquin about 1770-76, the fruit yellow. It is cultivated in Martinique.<sup>8</sup>

*C. tetragonum*.—This is said by Booth<sup>9</sup> to be the *bonnet* pepper

<sup>1</sup> Gard. in India, 153.

<sup>2</sup> Noisette, l. c.

<sup>3</sup> 1542, Fuchsius.

<sup>4</sup> Pharmacog., 453.

<sup>5</sup> Report of the Bot. of U. S. and Mex. Bound. Survey, 152,

<sup>6</sup> Drury, III.

<sup>7</sup> Miller's Dict.

<sup>8</sup> Miller's Dict.

<sup>9</sup> Treas. of Bot.

of Jamaica. The name appears in Long's list, edition of 1774. *C. tetragonum* Mill., 1737, is referred by him to *C. annuum* L., and also to *C. grossum* L., to which latter form it appears to rightly belong. It is now cultivated under the name of *paprika* in Lower Hungary on a large scale, the fruit three and a half to five inches long and three-quarters to one inch in diameter.<sup>1</sup> As this is a sweet variety, it is probably *C. grossum*, which is a form with very variable fruit. The name *bonnet* pepper is used by Miller, 1743, for *C. angulosum*, as already stated.

*C. violaceum* Humb. is apparently a variety of *C. annuum*, but the plant more or less deeply violet-tinted, the fruit black-violet on one side and reddish-green on the other, but becoming red in ripening. It came from Spanish America, and is now an occasional inmate of our gardens.

The twenty-two named varieties grown during 1882 and 1883 at the New York Agricultural Experiment Station seem to belong to *C. annuum* L., and while we are not prepared to affirm that they all can be identified with one or the other of the above named species, yet we think there is probable identification sufficient to justify the conclusion that no strongly marked sorts have appeared during the five centuries of European culture. When we consider that the various kinds of peppers easily cross-fertilize, and hence the difficulty of keeping the sorts distinct, we are led to believe that many of the forms which have received specific description are true agricultural or form-species, sufficiently distinct at their first appearance by discovery to justify a conclusion as to a long antiquity, and as to their power of resisting change. The whole *genus* needs revision from an agricultural instead of a strictly botanical standpoint.

*Potato*.—De Candolle in his *Origin of Cultivated Plants*, says truly: "No one can doubt that the potato is of American origin." There are some interesting notes, however, which De Candolle has not used. Prescott in his *Conquest of Peru*,<sup>2</sup> says in 1526 Pizarro, at the Rio de San Juan, eat the potato as it grew without cultivation. This evidence is as conclusive as to its wild state as the one which De Candolle quotes from Gray, which "sufficiently proves its wild state in Chili, viz., that even among the Araucanians, in the mountains of Malvarco, the soldiers of

<sup>1</sup> Gard. Chron., Sept. 10, 1881, 343.

<sup>2</sup> I, 248.

Pincheira used to go and seek it for food.<sup>1</sup> Prescott adds, on the authority of Xerez,<sup>2</sup> that along the coast of Peru he saw the hill-sides covered with the potato in cultivation.

Pedro de Cieza de Leon, who traveled in Peru, 1532-5, says that the principal food of the Collao was potatoes, which "are like earth nuts."<sup>3</sup> John Hawkins, in his second voyage, 1564, says the potatoes at Margarita island, "be the most delicate rootes that may be eaten, and doe far exceede their parsenips or carets,"<sup>4</sup> which, if sweet potatoes be not meant, indicate their introduction to the island, as the context parsenips and carets shows. Captains Preston and Sommers, 1595, say at Dominica island "the Indians came unto us in canoes \* \* \* \* and brought in them plantains, pinos and potatoes,"<sup>5</sup> which indicates how potatoes and other victuals were taken aboard ships as provisions. Under the name *openawke* Heriot describes, in 1584, what is supposed to be the potato in Virginia, and of which De Candolle thinks there can be no doubt. This fact would seem to indicate that *potatoes* in our quotation meant potato and not the sweet potato. It is quite probable that Hawkins carried the first potatoes to Virginia, for in 1565, after relieving the famine among the French on the banks of the River May (St. Johns), he sailed northward toward Virginia, which name included the Carolinas and a large extent of coast at this time, and had this tuber aboard as he brought tubers from Santa Fé de Bogota on this voyage into Ireland, as has been currently stated, and we know not upon what evidence Miller and Sir J. Banks believes these tubers to have been the sweet potato. What renders the opposite view more tenable is the course that ships customarily sailed, this being to Virginia by the way of the West Indies; and as well by the fact that Virginia received the potato from the beginning of its settlement. It is mentioned by Heriot, 1584, as already stated; is noticed there again in 1609,<sup>6</sup> in 1648,<sup>7</sup> and again in 1649 under circumstances that can leave no doubt: "The West India potatoe (by much more delicate and large than we have here grow-

<sup>1</sup> Flora Chiliena, v, 74.

<sup>2</sup> Conq. del Peru ap. Barcia, III, 181.

<sup>3</sup> Travels. Hak. Soc. ed., 360.

<sup>4</sup> Sec. Voy. Hak. Soc. ed., 27.

<sup>5</sup> Hak. Voy., IV, 62.

<sup>6</sup> A True Decl. of Va., Lond., 1610, 13.

<sup>7</sup> A perfect Desc. of Va., 1649, 4.

ing) besides that it is a food excellently delicious and strongly nourishing, fixes himself wherever planted, with such an irradicable fertility, that being set it eternally grows."<sup>1</sup> We see here the distinction drawn clearly between the sweet potato described and the potato already under cultivation.

The argument that if the introduction by Hawkins into Ireland had been the potato, it would have secured dissemination, loses its force when we consider the slowness of its progress in England. It was certainly grown by Gerarde in 1597. In 1663 Mr, Buckland, of Somersetshire, drew the attention of the Royal Society to its value, earnestly recommending the general cultivation of the potato throughout the kingdom. In 1664 Forster recommends its cultivation in England. Ray, 1686, takes no further notice of the potato except by saying it is dressed in the same manner as Spanish batatas; Merritt, 1687, records that potatoes were then grown in many fields in Wales; Worlidge, 1687, describes potatoes as being very useful as "forcing fruits," and does not hear that field culture has yet been tried; Lisle, a little later, is wholly silent about the potato, as are also London and Wise, 1719; Mortimer, 1708, says the potato is not as good nor as wholesome as the Jerusalem artichoke, but that it may prove good for swine; Bradley, about 1719, says they are of less note than horse-radish, radish scorzoners, beets and skirrets, but as they are not without their admirers, he will not pass them by in silence. Other authorities to the same purport are given in Martyns Miller's Dictionary.

This reference to quality by Mortimer<sup>2</sup> is suggestive that the potato, until improved by European culture, was not the vegetable it now is for quality, and this poor quality it then may have possessed, may account for its slow progress, and even for its former recommendations for animals rather than for man, as by Worlidge above quoted, and Clusius says that the plant had become so common in Italy that it was eaten like a turnip and given to the pigs. Targioni does not, however, recognize this former wide cultivation in Italy, and says that it was only at the end of the sixteenth century or beginning of the seventeenth that the cultivation became known in Tuscany. In support of the theory that the potato was not as palatable in early times as now,

<sup>1</sup> Virginia by E. W[illiams], Gent., Lond., 1650, 48.

<sup>2</sup> Gard. Kalendar, 1708.

we may quote a few authorities. Miller, in 1754, says they were despised by the rich and deemed only the proper food for the meaner sort of persons. Mawe and Abercrombie, 1778, give caution as to their deleterious properties unless thoroughly well cooked. In 1830, in Watson's Annals of Philadelphia, it is written that a gentleman, "now in his 90th year, told me that the potatoes used in his early life were very inferior to the present. They were called Spanish potatoes, and were very sharp and pungent in the throat and smell. They send occasionally a better sort from Liverpool." In 1698 potatoes were scarce, Jerusalem artichokes abundant, in French markets.

Were a new root equal in edible quality to our snowflake potato and of the same ease of culture, now introduced, who can doubt its quick recognition and adoption? It would not be compared to the parsnip or carrot, as Hawkins did his potato, but would be described in glowing terms. We would not have its medicinal qualities under discussion, but would be satisfied to have it on our tables. If, however, we should now eat some of our poorer qualities of potato, such as were commonly grown for cattle a quarter of a century ago, we would see in the soggy and hard condition a root which might well have excited the admiration of Hawkins, and which would have suggested the parsnip or the carrot for comparison more than would a sweet potato.

*(To be continued.)*

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## NOTES ON THE LABRADOR ESKIMO AND THEIR FORMER RANGE SOUTHWARD.

BY A. S. PACKARD.

*(Continued from p. 481, May number.)*

THE stone structures, particularly the grave or dolmen-like burial places referred to by the Moravians, are of course matters of very great interest. In connection with that statement we would draw attention to the following extract from "The three voyages of Martin Frobisher," second voyage, 1577, Hakluyt Society, London, 1867, p. 136:

"In one of the small islands here [near Leicester's Iland in Beares sound] we founde a tombe, wherein the bones of a dead man lay together, and our savage being with us and demanded (by signes) whether his countryman had not slain this man and eat